Corrected Claims

What is claimed is:

1. (currently amended) A method of decompressing an input compression encoded data set wherein the input compression encoded data set in comprised of variable compression ratio, variable length data packets, the method comprising:

receiving a compression encoded data set;

dividing the received compression encoded data set into variable compression ratio, variable length data packets;

determining a fixed length for all of the data packets;

determining a density for each data packet;

~~adjusting the variable length of each variable compression ratio, variable length data packet to the determined fixed length~~ adjusting the variable length of each variable compression ratio, variable length data packet to the determined fixed length by adding a group of data bytes to the variable compression ratio, variable length data packet in order to form a variable compression ratio, fixed length data packet;

determining an appropriate decompression ratio to apply to each variable compression ratio, fixed length data packet;

decompressing each fixed length data packet using the determined decompression ratio;

outputting the decompressed data.

2. (original) The method of claim 1, wherein determining a fixed length for all of the data packets includes determining the fixed length of each data packet based on the length code.

3. (original) The method of claim 2, wherein the time period is twenty milliseconds.

4. (original) The method of claim 1, wherein determining a density for each data packet includes determining the number of valid data bytes in each data packet.

5. (original) The method of claim 1, wherein determining the number of valid data bytes in each data packet includes extracting the number of valid data bytes in each data packet from a length code of each data packet.

6. (original) The method of claim 5, wherein extracting the number of valid data bytes in each data packet from a length code of each data packet includes extracting the number of valid data bytes from a length code at a beginning of each data packet.

7. (original) The method of claim 5, wherein extracting the number of valid data bytes in each data packet from a length code of each data packet includes extracting the number of valid data bytes from a length code at an end of each data packet.

8. (original) The method of claim 1, wherein adjusting the variable length of each variable compression ratio, variable length data packet to the determined fixed length includes buffering at least one variable length data packet until the variable length of the at least one variable length data packet is adjusted to a fixed length.

9. (original) The method of claim 1, wherein adjusting the variable length of each variable compression ratio, variable length data packet to the determined fixed length includes adding null set data bytes to any valid data bytes in each variable compression ratio, fixed length data packet to expand the variable length of each variable compression ratio, variable length data packet.

10. (original) The method of claim 1, wherein determining an appropriate decompression ratio to apply to each variable compression ratio, fixed length data packet includes determining the appropriate decompression ratio based on the determined density for each data packet.

11. (original) An apparatus for decompressing data, comprising:

an input circuit that receives incoming compressed data, wherein the incoming compressed data includes at least one variable compression ratio, variable length data packet including at least a length code;

a data packet decoding processor that determines the length of the at least one variable compression ratio, variable length data packet based on the length code;

a first decompression processor that converts the at least one variable compression ratio, variable length data packet into at least one variable compression ratio, fixed length data packet;

a second decompression processor that determines the amount of data in the at least one variable compression ratio, fixed length data packet, and decompresses the at least one variable compression ratio, fixed

length data packet into at least one decompressed, fixed length data packet, using a determined data decompression ratio; and

an output circuit that outputs the at least one decompressed, fixed length data packet.

12. (original) The apparatus of claim 11, wherein the fixed length of each fixed length data packet is determined by the length code.

13. (original) The apparatus of claim 11, wherein the fixed length of each fixed length data packet is 20 milliseconds in length.

14. (original) The apparatus of claim 11, wherein the determined data decompression ratio is determined based on the amount of data in the at least one variable compression ratio, fixed length data packet.

15. (original) The apparatus of claim 11, wherein the first decompression processor converts the at least one variable compression ratio, variable length data packet into at least one variable compression ratio, fixed length data packet by adding null set data bytes the at least one variable compression ratio, variable length data packet to expand the variable length of the at least one variable compression ratio, variable length data packet.

16. (original) The apparatus of claim 11, wherein the apparatus also includes:

a first memory that stores the at least one variable compression ratio, variable length data packet until the at least one variable

compression ratio, variable length data packets can be processed by the first decompression processor.

17. (original) The apparatus of claim 11, wherein the apparatus also includes:

a second memory that stores the at least one decompressed, fixed length data packet until the at least one decompressed, fixed length data packet can be output, via the output circuit.

18. (currently amended) A system for decompressing data, the system comprising:

an input circuit that receives incoming compressed data, wherein the incoming compressed data includes at least one variable compression ratio, variable length data packet including at least a length code;

a data packet decoding processor that determines the length of the at least one variable compression ratio, variable length data packet based on the length code;

a first decompression processor that converts the at least one variable compression ratio, variable length data packet into at least one variable compression ratio, fixed length data packet by adding null set data bytes to the at least one variable compression ratio, variable length data packet to expand the variable length of the at least one variable compression ratio, variable length data packet;

a second decompression processor that determines the amount of data in the at least one variable compression ratio, fixed length data packet, and decompresses the at least one variable compression ratio, fixed

length data packet into at least one decompressed, fixed length data packet, using an appropriate data decompression ratio, wherein the appropriate decompression ratio is based on the amount of data in the at least one variable compression ratio, fixed length data packet; and

an output circuit that outputs the at least one decompressed, fixed length data packet.

19. (original) The system of claim 18, wherein the fixed length of each fixed length data packet is determined by the length code.

20. (original) The system of claim 18, wherein the fixed length of each fixed length data packet is 20 milliseconds in length.

21. (original) The system of claim 18, wherein the system also includes:

a first memory that stores the at least one variable compression ratio, variable length data packet until the at least one variable compression ratio, variable length data packet can be processed by the first decompression processor.

22. (original) The system of claim 18, wherein the system also includes:

a second memory that stores the at least one decompressed, fixed length data packet until the at least one decompressed, fixed length data packet can be output, via the output circuit.